

**Notice of Allowability**

Application No.

10/712,961

Applicant(s)

SALICE, LUCIANO

Examiner

Chuck Mah

Art Unit

3677

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone interview of May 25 2006.
2. ☒ The allowed claim(s) is/are 23-31 and 39-42.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|   | 9. <input type="checkbox"/> Other _____.  |

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1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on May 25, 2006, applicant requested an extension of time for two MONTH(S) and authorized the Director to charge Deposit Account No. 04-1121 the required fee of \$225 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

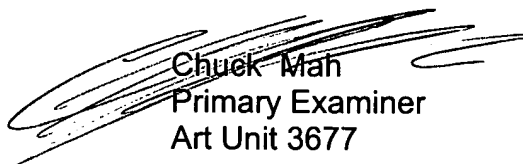
**Amendments to the claims are reflected in the listing of claims which begins on page 4 of this paper.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Mah whose telephone number is (571)272-7059. The examiner can normally be reached on 5/4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on (571)272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Chuck Mah  
Primary Examiner  
Art Unit 3677

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Claims 1-22. Canceled

23. (currently amended) The A hinge (1) of Claim 24, additionally comprising a first movable hinge section (3).

a second hinge section (2) including a fixed stop section,

at least one joint axis (7) interconnecting said first and second hinge sections

(3,2),

a damping device (16) mounted upon one of said first and second hinge sections

(3,2) and comprising a movably-mounted damping member (19),

gear means mounted upon said first and second hinge sections (3,2) for acting upon said damping member (19) at least in a region of a closed position of said hinge (1),

said gear means comprising at least three movable gear members (20, 22, 27),

an axis (6) positioned upon one (2) of said hinge sections (2, 3) for supporting a one of the gear member members (22) intermediately-mounted between said two other gear members (20, 27) of said at least three gear members (20, 22, 27), and

said intermediately-mounted gear member (22) comprising two separate engaging members (21, 23; 33, 23) arranged

(i) concentrically about said axis (6) supporting said intermediately-mounted gear

member (22),

(ii) at a periphery of said intermediately-mounted gear member (22), and

(iii) at unequal distance from said axis (6) supporting said intermediately-mounted gear (22),

with said engaging member (23) mounted further from said axis (6) arranged to engage one (20) of said gears (20, 22, 27) contacting said damping member (19), and

said engaging member (33; 21) mounted closer to said axis (6) arranged to engage the other (27) of said gears (20, 22, 27) mounted upon the other (3) of said hinge sections (3, 2).

24.(currently amended) The hinge of Claim 23, wherein said engaging members (21, 23) are constituted by toothed segments (21, 23) concentrically-curved with respect to said axis (6) and having different radii of curvature,

with said engaging member (23) mounted further from said axis (6) having the larger radius of curvature and said engaging member (21) mounted closer to said axis (6) having the smaller radius of curvature, and

said other gear (27) of said gears (20, 22, 27) engaging said engaging member (33;21) mounted closer to said axis (6) being rotatably mounted and comprising a toothed segment (27) arranged to engage said toothed segment (21) of said intermediately-mounted gear (22) having the smaller radius of curvature.

25.(Currently Amended) The hinge of Claim 23, wherein

said engaging member (23) mounted further from said axis (6) being constituted by a toothed segment (23) concentrically-curved with respect to said axis (6),

said engaging member (33) mounted closer to said axis (6) being constituted by

either a projection or fork-shaped recess (33), and

said other gear (27) of said gears (20, 22, 27) engaging said member (33:21)  
mounted closer to said axis (6) comprising a recess or projection (37) arranged to  
 engage said projection or fork-shaped recess (33) of said engaging member (33)  
mounted closer to said axis (6).

26.(Currently Amended) The hinge of Claim 23, wherein

said hinge (1) is a double-joint hinge,

said axis (6) is mounted upon said second hinge section (2) which is fixed, and

said other gear (27) of said gear members (20, 22, 27) engaging said engaging  
member (33:21) mounted closer to said axis (6) comprises an engaging member (27)  
 arranged to engage said engaging member (21) mounted closer to said axis (6) and a  
 connecting rod (5) mounted upon said movable hinge section (3).

27.(previously presented) The hinge of Claim 26, additionally comprising

a second connecting rod (4) mounted upon said movable hinge section (3) and  
 axis (6) supporting said intermediately-positioned gear member (22).

28.(previously presented) The hinge of Claim 23, wherein

said intermediately-positioned gear member (22) is symmetrically-positioned with  
 respect to a diameter plane (24) extending through centers of both said engaging  
 members (21, 23).

29.(previously presented) The hinge of Claim 27, additionally comprising

means for overcoming damping force and comprising

said first connecting rod (5) comprising legs (13),

one (2) of said hinge sections (2, 3) comprising a cross-piece (14),

a hairpin-shaped spring (12) being retained between said legs (13) and supported on said joint axis (7) and cross-piece (14), and

said second connecting rod (4) comprising a rolled-up bearing eye (10) mounted about said axis (6) supporting said intermediately-positioned gear (22) and a tongue (11) extending from said bearing eye (10) and arranged to act as a cam sliding along a leg of said spring (12).

30.(Currently Amended) The hinge of Claim 23, wherein

said damping member (46 19) is mounted upon said fixed hinge section (2) which is fixed, and

said ~~other gear~~ (27[;] 37; 45) ~~of said gears~~ engaging said engaging member (33;21) mounted closer to said axis (6) is rotatably mounted upon said joint axis (7; 60) in turn mounted upon said fixed hinge section (2).

31.(Currently Amended) The hinge of Claim 26, wherein said connecting rod (5) is arranged to be supported by or interconnect said two hinge sections (2,3) and rigidly connected to said ~~other gear~~ (27[,] 37) ~~of said gears~~ engagning said engaging member (33;21) mounted closer to said axis (6).

Claims 32-38. Canceled

39.(Previously Presented) The hinge of Claim 24 wherein ratio of said smaller: larger radii is from 1:1.5 to 1:3.

40.(Currently Amended) The hinge of Claim 24 wherein the radius of said engaging member (23) mounted further from said axis (6) is larger than radius of said gear (20) contacting said damping member (19).

41.(Currently Amended) The hinge of Claim 23, wherein said engaging member

(23) engaging said gear (20) in turn contacting said damping member (19), is arranged to impart rotary movement over a range of 60° to 70°.

42. (Currently Amended) The hinge of Claim 23, wherein said intermediately-mounted gear (22) and ~~other~~ gear (27[, ]~~37, 45~~) engaging said engaging member (33;21) mounted closer to said axis (6) are arranged to engage at an angular position 20°-30° before reaching a completely-closed position of said hinge (1) to provide damping action.

Claim 43. Canceled

